Medication Storage and Security: The #1 Non-Complaint Medication Management Standard

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Learning Objectives

• Describe the importance of maintaining safe storage and security of medications
• Define medication storage and medication security
• Outline all the Joint Commission standards related to medication storage and medication security
• Describe strategies to implement best practices for maintaining proper storage of medications

Self-Assessment Questions

• True or False. Periodic inspection of medication storage is only required in the inpatient care areas.
• What are the most common non-compliant medication management standards?
  a. Medication Order Review
  b. Medication Storage
  c. Medication Administration
  d. Medication Dispensing
• True or False. The beyond-use-date for an opened multi-dose vials is 28 days.

Medication Management Process

Medication Storage & Security

• Importance
  – Medication storage is designed to:
    • assist in maintaining medication integrity
    • promote the availability of medications when needed
    • minimize the risk of medication diversion
    • reduce potential for dispensing errors
  – Law and Regulation and manufacturers’ guidelines further define the hospital’s approach to medication storage

The Joint Commission, Hospital Accreditation Standards, 2009
Medication Storage & Security

**Army Top Non-Compliant Standards from 2006 to 2008**

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**Definitions**

- Medication storage – defines medication location such as drug cabinet, automated dispensing cabinet, refrigerator, medication cart as well as proper methods for storing medications
- Medication security – addresses keeping medications in a storage area such that unauthorized personnel are prevented from obtaining access to the medications

**Revised Center for Medicare and Medicaid Services (CMS) Conditions of Participation**

- Federal Register 11/27/06, effective 1/28/07
- All drugs and biologicals be kept in a secure area, and locked when appropriate
- Schedules II, III, IV, and V drugs must be kept locked within a secure area
- Only authorized personnel may have access to locked areas

**Issues:**

- Carts/medications are found:
  - Not within observation of nurses
  - In corridors with public access
  - On counters
- Locked areas not locked or keys not secure

**Best Practices:**

- Non-mobile carts must be locked
- Place mobile carts in a locked room
- Medications at bedside only if self-administered
- “Fanny-pack” scenarios

**“Secure Area” as defined by CMS**

- An area in which staff are actively providing patient care or preparing to receive patients
  - OR suite when staffed and actively providing care
  - OR suite when not operational—not secure
- Areas restricted to authorized personnel only are secure
  - Organization determines which staff are authorized (e.g. janitors, maintenance staff)
  - Areas where patients and visitors are not allowed without the supervision or presence of a health care professional are secure

**EP 2 - Store medications according to the manufacturers’ recommendations or, in the absence of such recommendations, according to a pharmacist’s instructions**

**EP 3 - Store controlled medications to prevent diversion**

**EP 4 - Addressing the control of medication between receipt by an individual health care provider and administration of the medication**

**EP 6 - Prevent unauthorized individuals from obtaining medications**

**EP 7 - Stored medications and the components used in their preparation are labeled with the contents, expiration date, and any applicable warnings**
MM.03.01.01, Standard & Elements of Performance

- EP 8 - Removes all expired, damaged, and/or contaminated medications
- EP 9 - Keep concentrated electrolytes present in patient care areas only when patient safety necessitates their immediate use
- EP 10 - Medications available in the most ready-to-administer forms commercially available
- EP 18 - Periodically inspects all medication storage areas

The Joint Commission, Hospital Accreditation Standards, 2009

MM.03.01.01, EP 2, Medication Storage

- Store medications according to manufacturer’s recommendations
- Best Practices:
  - Temperature Monitoring
    - Centralized Monitoring System
    - Wireless Monitoring System
    - Alarm Dialing Monitors
  - Best Practices
    - SensaPhone™
    - TempTrak™
    - ThermaViewer™

MM.03.01.01, EP 2, Medication Storage

- Continuous monitoring of temperature
  - Staff must understand their responsibilities:
    - Temperature monitoring
    - Resolving problems related to out-of-range temps
    - Staff training component
    - Watch out for those refrigerators in areas not staffed 7 days/week
    - Digital thermometers may be an answer

MM.03.01.01, EP 3, Medication Storage

- Prevent drug diversion
  - Scheduled drugs are locked
  - Usage record is maintained
  - Discrepancies are resolved
  - Define resolution process
  - Define process of wasting
  - Access to automated cabinet is current
  - Staff must log out of automated cabinets
  - Electronic reporting to identify potential diversion

MM.03.01.01, EP 4 & 5, Medication Storage

- Written policy addressing the storage of medications between receipt by an individual healthcare provider and administration of medication, including:
  - Safe storage
  - Safe handling
  - Security
  - Disposition
  - Return to storage

Excerpt of a Sample Policy

- Any drug received from the pharmacy should be placed in an approved storage area as soon as possible, not to exceed 30 minutes from time of receipt. (Handling, Storage)
- All drugs removed from a medication storage area must be removed just prior to administration and only for one patient at a time. (Handling)
- Once removed, the drug must remain with the individual at all times and should not be left unattended. (Security)
- The drug should not be left on or in any area exceeding 80 degrees, including in pockets. (Storage)
- If not administered or used, the drug should be returned to the original storage area within 30 min. (Disposition)
MM.03.01.01, EP 6  Medication Storage

- Prevent unauthorized individuals from obtaining medications in accordance with hospital’s policy, law or regulation
- Non-licensed personnel
  - Risk Assessment
- Access to automated dispensing cabinet

MM.03.01.01, EP 7  Medication Storage

- Multi-Dose Vials (MDV)
  - USP Chapter 797 - 28 days “beyond use date”
  - Date MDV with expiration date
  - Best Practices:
    - Minimize use of MDV
    - Document: date opened and expiration date (28 days from day MDV is penetrated)
  - Pre-printed labels available

MM.03.01.01, EP 7  Medication Storage

- Beyond Use Date
  - Contrast media and warmers
  - Solution bags/bottles and warmers
  - Glucometer strips

MM.03.01.01, EP 8  Medication Storage

- Remove expired, damaged and/or contaminated medications
  - Procedures for handling expired medications
  - Ward/clinic inspections
  - Crash cart management
  - Storage of expired medications

MM.03.01.01, EP 9  Medication Storage

- Concentrated Electrolytes
  - Best Practices:
    - Remove from patient care units
    - If required for emergencies (OR, ER, etc.):
      - P&T Committee approval
      - Segregate and/or Lock up
      - Label (“MUST BE DILUTED” or “HIGH RISK MEDICATION”)
  - Develop standard doses and unit of measure
    - Pre-printed forms or electronic order sets
  - High-alert medication procedures
MM.03.01.01, EP 10
Medication Storage

- Most ready-to-administer forms available from manufactures
  - Contrast media, heparin, saline flush, others
  - Insulin pens
- Unit-doses repackaged by the pharmacy or a licensed packaging company

MM.03.01.01, EP 18
Medication Storage

- Periodic inspection of storage areas
  - Inpatient and outpatient areas
  - Appropriately train staff
  - Unannounced inspection
  - Communicate findings with leadership

MM.03.01.03
Emergency Medications

- Issue
  - Emergency medications selection
  - Process in place to replace emergency medications & supplies when needed
- Best Practices:
  - Maximize use of unit-dose, age-specific, ready-to-administer
  - Pediatric dosing guidelines
    - Broselow™ Pediatric Emergency Tape
  - Emergency medications are secure

MM.03.01.05
Medications Brought In

- Defines when medications brought in by patient or LIP can be administered
- Prior to use, identification and visual evaluation of integrity
- Inform prescriber/patient if medications brought in are not permitted

Answers To Self-Assessment Questions

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Closing Remarks

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